

Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (currently amended): A connector, comprising:

at least one tunnel having a first portion and a second portion; and

at least one pin, wherein at least a portion of said pin is positioned within said tunnel;

wherein said first portion of said tunnel has a first inner surface, wherein said first inner surface runs along an axis that is at a predetermined non-zero degree angle with respect to a vertical axis of said tunnel, wherein said first inner surface forces at least a portion of said pin to move along a portion of a corresponding connector in at least a first ~~predetermined~~ direction as said connector engages a the corresponding connector, whereby contaminants are at least partially removed from at least one of said portion of said pin and the portion of the corresponding connector as said first inner surface forces said portion of said pin to move along the portion of the corresponding connector in said first ~~predetermined~~ direction.

2. (canceled)

3. (currently amended): The connector according to claim 1, wherein the portion of the corresponding connector includes a contact and said portion of said pin includes a contact surface that contacts a the contact of the corresponding connector, wherein said first inner surface forcing said portion of said pin to move along the portion of the corresponding connector in said first ~~predetermined~~ direction causes said contact surface to slide against the contact of the corresponding connector, whereby the contaminants on at least one of said pin and the contact of the corresponding connector are at least partially removed from at least one of said pin and the contact of the corresponding connector as said contact surface slides against the contact of the corresponding connector.

4. (currently amended): The connector according to claim 1 2, wherein said pin includes an elongated portion, a fork and a spring, wherein said elongated portion is attached to said spring and said spring is attached to said fork.

5. (currently amended): The connector according to claim 4, wherein said elongated portion extends from said spring along an axis at a predetermined angle with respect to a vertical axis of said pin, wherein said predetermined angle of said axis that said elongated portion runs along at least substantially matches said predetermined non-zero angle of said axis that said first inner surface runs along.

6. (currently amended): The connector according to claim 1 2, wherein said first portion of said tunnel further includes a second inner surface opposed to said first inner surface, wherein said second inner surface runs along an axis that is at a predetermined angle that at least substantially matches said predetermined non-zero angle of said axis that said first inner surface runs along.

7. (currently amended): The connector according to claim 6, wherein said second inner surface forces at least the portion of said pin to move along the portion of the corresponding connector in a second ~~predetermined~~ direction as said connector disengages the corresponding connector.

8. (currently amended): The connector according to claim 7, wherein said second ~~predetermined~~ direction is at least substantially opposite to the first ~~predetermined~~ direction.

9. (original): The connector according to claim 4, wherein said first portion houses said elongated portion of said pin and said second portion houses said spring of said pin.

10. (original): The connector according to claim 1, further comprising a body, wherein said body includes a plurality of said tunnels and at least a portion of said pins extend beyond said tunnels, wherein said body includes a head that fits at least substantially within the corresponding connector.

11. (original): The connector according to claim 1, wherein said connector is an accessory connector and the corresponding connector is mounted on an electronic device.

12. (original): The connector according to claim 3, wherein said pin includes an elongated portion, a fork and a spring, wherein said elongated portion is attached to said spring and said spring is attached to said fork, wherein at least a portion of said elongated portion is curved.

13. (original): The connector according to claim 12, wherein said elongated portion has a segment that runs along an axis that is at a predetermined angle with respect to a horizontal axis of said pin, wherein said segment is attached to said curved portion of said elongated portion and said spring.

14. (currently amended): The connector according to claim 13, wherein said first ~~predetermined~~ direction is a curved direction that runs along an arc thereby causing said contact surface of said pin to slidably rotate against the contact of the corresponding connector, whereby the contaminants on at least one of said pin and the contact of the corresponding connector are at least partially removed from at least one of said pin and the contact of the corresponding connector as said contact surface slidably rotates against the contact of the corresponding connector.

15. (original): The connector according to claim 12, wherein said first portion of said tunnel further comprises a second inner surface opposed to said first inner surface, wherein said first inner surface and said second inner surface are curved, and wherein the shape of said first inner surface and said second inner surface substantially match said curved portion of said elongated portion.

16. (currently amended): The connector according to claim 15, wherein said second inner surface, in combination with said first inner surface, forces said pin to move in said first ~~predetermined~~ direction.

17. (currently amended): The connector according to claim 16, wherein said first inner surface and said second inner surface force said pin to move in a second ~~predetermined~~ direction, wherein said second ~~predetermined~~ direction is a curved direction that is opposite that of said first ~~predetermined~~ direction, wherein said second ~~predetermined~~ direction causes said contact surface of said pin to slidably rotate against the contact of the corresponding connector.

18. (currently amended): A system for cleaning contacts of corresponding connectors, comprising:

a first connector including at least one tunnel having a first portion and a second portion and at least one pin, wherein at least a portion of said pin is positioned within said tunnel; and

a second connector;

wherein said first portion of said tunnel has a first inner surface, wherein said first inner surface runs along an axis that is at a predetermined non-zero degree angle with respect to a vertical axis of said tunnel, wherein said first inner surface forces at least a portion of said pin to move along a portion of said second connector in a first predetermined direction as said first connector is engaged with said second connector;

wherein contaminants on at least one of said portion of said pin and said portion of said second connector are at least partially removed ~~from at least one of said pin and said second connector~~ as said first inner surface forces said portion of said pin to move along said portion of said second connector in said ~~predetermined~~ first direction.

19. (canceled)

20. (currently amended): The system according to claim 18 ~~49~~, wherein said portion of said second connector includes a contact and said portion of said pin includes a contact surface that contacts a said contact of said second connector, wherein said first inner surface forcing said portion of said pin to move along said portion of said second connector in said first ~~predetermined~~ direction causes said contact surface to slide against said contact of said second connector.

21. (original): The system according to claim 18, wherein said tunnel further comprises a second inner surface and said pin includes an elongated portion, wherein said first inner surface, said second inner surface and said elongated portion are curved.

22. (currently amended): The system according to claim 21, wherein said portion of said second connector includes a contact and said portion of said pin further includes a contact surface that contacts a said contact of said second connector, wherein said first inner surface forcing said portion of said pin to move along said portion of said second connector in said first ~~predetermined~~ direction causes said contact surface to slidably rotate against said contact of said second connector.